

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Yasuko FUKUZAWA et al.

Serial No.: Not yet assigned (Division of 10/326,978 filed December 24, 2002)

Filed: Even date herewith

For: **HETEROGENEOUS COMPUTER SYSTEM, HETEROGENEOUS
INPUT/OUTPUT SYSTEM AND DATA BACK-UP METHOD
FOR THE SYSTEMS**

Group: 2182

Examiner: Tanh Q. Nguyen

**INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.97 & 1.98**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

September 17, 2003

Sir:

Pursuant to 37 CFR 1.97(b) and 1.98, attached hereto are two (2) forms PTO/SB/O8A equivalent to form PTO-1449 listing the fifty-five (55) references which were cited by or submitted to the U.S. Patent and Trademark Office in prior application Serial No. 10/326,978 filed December 24, 2003, the parent application of the present continuation application.

Pursuant to 37 CFR 1.98(d), copies of these fifty-five (55) references are not being provided with this Information Disclosure Statement because the references were previously cited by or submitted to the Office in the prior applications identified above and the prior applications are being relied upon in the present application for an earlier filing date under 35 USC 120 as required by 37 CFR 1.97(d)(1), and the

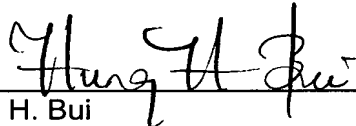
references which were submitted to the Office in the prior applications were submitted in compliance with the version of 37 CFR 1.98(a)-(c) in effect as of the filing date of this Information Disclosure Statement as required by 37 CFR 1.98(d)(2).

Pursuant to 37 CFR 1.97(b)(1), this Information Disclosure Statement is being submitted within three months of the filing date of the above-identified national application.

It is respectfully requested that this Information Disclosure Statement be considered.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

A handwritten signature in cursive script, appearing to read "Hung H. Bui", is written over a horizontal line.

Hung H. Bui
Registration No. 40,415

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Complete if Known		
			Application Number		
			Not yet assigned (Division of 10/326,978, filed December 24, 2003)		
			Filing Date		
			Even date herewith		
			First Named Inventor		
			Yasuko FUKUZAWA		
			Art Unit		
			2182		
			Examiner Name		
			Tanh Q. Nguyen		
			Attorney Docket Number		
			500.36172VC4		
Sheet	1	of	2		

U.S. PATENT DOCUMENTS						
Examiner Initials ⁵	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)				
	AA	US- 4,768,150		08/30/1988	Chang et al.	
	AB	US- 4,864,492		09/05/1989	Blakely-Fogel et al.	
	AC	US- 4,941,084		07/10/1990	Terada et al.	
	AD	US- 4,947,367		08/ 1990	Chang et al.	
	AE	US- 5,051,887		09/24/1991	Berger et al.	
	AF	US- 5,155,845		10/13/1992	Beal et al.	
	AG	US- 5,251,318		10/05/1993	Nitta et al.	
	AH	US- 5,261,080		11/09/1993	Khoyi et al.	
	AI	US- 5,313,617		05/17/1994	Nakano et al.	
	AJ	US- 5,349,656		09/20/1994	Kaneko et al.	
	AK	US- 5,388,013		02/07/1995	Nakamura	
	AL	US- 5,394,534		02/28/1995	Kulakowski et al.	
	AM	US- 5,504,882		04/ 1996	Chai et al.	
	AN	US- 5,530,819		06/25/1996	Day, III et al.	
	AO	US- 5,535,372		07/09/1996	Benhase et al.	
	AP	US- 5,546,536		08/ 1996	Davis et al.	
	AQ	US- 5,546,541		08/ 1996	Drew et al.	
	AR	US- 5,568,628		10/22/1996	Satoh et al.	
	AS	US- 5,613,100		03/18/1997	Anezaki	
	AT	US- 5,630,092		05/13/1997	Carreiro et al.	
	AU	US- 5,655,140		08/05/1997	Haddock	
	AV	US- 5,664,144		09/02/1997	Yanai et al.	
	AW	US- 5,680,580		10/ 1997	Beardsley et al.	
	AX	US- 5,680,640		09/01/1995	Ofek et al.	
	AY	US- 5,692,155		11/25/1997	Iskiyan et al.	
	AZ	US- 5,708,828		01/13/1998	Coleman	
	BA	US- 5,721,957		02/24/1998	Huang et al.	
	BB	US- 5,724,542		03/03/1998	Taroda et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials ⁵	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ² (if known)				
	BC	JP-04-326420	11-16-1992			
	BD	JP-07-152491	06-16-1995			

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard St.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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			Art Unit	2182	
			Examiner Name	Tanh Q. Nguyen	
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		Number-Kind Code ² (if known)				
	BE	US- 5,734,818		03/31/1998	Kern et al.	
	BF	US- 5,745,789		04/ /1998	Kakuta	
	BG	US- 5,758,125		05/26/1998	Misinal et al.	
	BH	US- 5,778,189		07/07/1998	Kimura et al.	
	BI	US- 5,812,843		09/22/1998	Yamazaki et al.	
	BJ	US- 5,835,939		11/10/1998	Kurokawa et al.	
	BK	US- 5,860,088		01/12/1999	Benhase et al.	
	BL	US- 5,875,479		02/23/1999	Blount et al.	
	BM	US- 5,884,310		03/16/1999	Brichta et al.	
	BN	US- 5,886,841		03/23/1999	Kikuchi	
	BO	US- 5,903,913		05/ /1999	Ofer et al.	
	BP	US- 5,978,890		11/02/1999	Ozawa et al.	
	BQ	US- 6,009,498		12/28/1999	Kumasawa et al.	
	BR	US- 6,041,391		03/21/2000	Kanda et al.	
	BS	US- 6,044,444		03/28/2000	Ofek	
	BT	US- 6,073,209		06/06/2000	Bergsten	
	BU	US- 6,081,826		06/27/2000	Masuoka et al.	
	BV	US- 6,098,129		08/ /2000	Fukusawa et al.	
	BW	US- 6,108,748		08/22/2000	Ofek et al.	
	BX	US- 6,115,797		09/05/2000	Kanda et al.	
	BY	US- 6,529,976		03/ /2003	Fukuzawa et al	

OTHER PRIOR ART—NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published		
	BZ	IBM Technical Disclosure Bulletin, Vol. 38, No. 06, June 1995, "High Performance Cooperative Count Key Data/Fixed Block Conversion Mechanism", pp. 333-335		
	CA	IBM Technical Disclosure Bulletin, Vol. 35, No. 3, August 1992, "Centralized and Rapid Backup/Restore For Work Lan File Services/VM", pp. 286-289		
	CB	Fujitsu Scientific & Technical Journal 31 (1995) June, No. 1. Kawasaki, JP "Storage Management Software for Mainframe and UNIX", By: Keiji Suzuki, et al. pp. 36-44		
	CC	Gelb, "System-managed storage," IBM Systems Journal, Vol. 28, No. 1, 1989, pp. 77-103		

Examiner Signature		Date Considered	
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